

REMARKS**INTRODUCTION:**

In accordance with the foregoing, claims 1, 10 and 12 have been amended, and new claims 17 and 18 have been added. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-8 and 10-18 are pending and under consideration. Reconsideration is respectfully requested.

EXAMINER INTERVIEW:

On July 1, 2008, an Interview was held with the Examiner Marc Zimmer and Applicants' attorney Darleen J. Stockley in attendance. The claims were discussed with reference to the cited references. Applicants' attorney explained that claim 9 was inadvertently canceled and would be re-added to the claims in the next response. Applicants thank the Examiner for his time and consideration. The Interview Summary faxed to Applicants on July 24, 2008 summarizes the interview results.

REPLACEMENT OF ORIGINAL CLAIM 9 (NEW CLAIM 17):

Original claim 9 was inadvertently canceled in the previous response. In accordance with page 5 of the Office Action, wherein the Examiner submitted that claim 9 was objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, original claim 9 has been added back by adding new claim 17. New claim 17 emphasizes the use of a PPE film as a mold releasing film for the production of a printed circuit board, which is novel. Thus, it is respectfully submitted that new claim 17 is in allowable form.

REJECTIONS UNDER 35 U.S.C. §§102 AND 103:

A. In the Office Action, at page 2, claims 1-2, 8, and 13-16 were rejected under 35 U.S.C. §102(a) as being anticipated by Kamo (JP 2002241601; hereafter, Kamo) for the reasons outlined previously. Claims 3-6 are separately rejected as being obvious over Kamo. These rejections are traversed and reconsideration is requested.

Independent claim 1 has been amended to include the terminology "having a thickness of 10-100 μm ." Kamo does not teach or suggest a mold releasing film for printed circuit board production or a film having a thickness of 10-100 μm . It is respectfully submitted that the terminology "for printed circuit board production" is particularly descriptive of the present invention, and the limitation "having a thickness of 10-100 μm " (see, e.g., page 33, lines 12-16 of

the specification) sets forth a particular difference in a thickness of film that is different from that which is set forth in Kamo (See Work Examples 1-6 in paragraphs [0055]-[0061] of the Detailed Description of Kamo, wherein the average thickness of a sheet was 0.31 to 0.34 mm).

Although Kamo discloses a film with a thickness of 0.010-1.0 mm in paragraph [0038], the examples thereof are entirely directed to a thickness of about 300 μm because Kamo requires a certain hardness/rigidity for a mechanical element, a printed circuit board and an insulating washer, as is disclosed in paragraph [0042] of Kamo. However, a PPE film with a thickness of 10 to 100 μm (the thickness of a film in the present application) cannot be used for the Kamo applications since such a PPE film does not provide sufficient rigidity. Conversely, it should be noted that a thick film cannot work as a mold releasing film in the present invention since a thick film cannot attain the necessary shape-following property upon pressing during a printed circuit board production.

Thus, it is respectfully submitted that Kamo does not teach or suggest a mold releasing film for printed circuit board production, which comprises a resin layer (P) having a thickness of 10-100 μm , containing (A) a polyphenylene ether-based resin in an amount of 50 wt% or more, as is recited in amended independent claim 1 of the present application.

Hence, it is respectfully submitted that amended independent claim 1 of the present application is not anticipated under 35 U.S.C. §102(a) by Kamo (JP 2002-241601). Since claims 2, 8, and 13-16 depend from amended independent claim 1, claims 2, 8, and 13-16 are not anticipated under 35 U.S.C. §102(a) by Kamo (JP 2002241601) for at least the reasons amended independent claim 1 is not anticipated under 35 U.S.C. §102(a) by Kamo (JP 2002241601).

B. In the Office Action, at page 2, claims 1, 8, and 13-15 were rejected under 35 U.S.C. §102(a) as being anticipated by Kohn (USPN 4,910,082; hereafter, Kohn). This rejection is traversed and reconsideration is requested.

Independent claim 1 has been amended to include the terminology "having a thickness of 10-100 μm ." Kohn does not teach or suggest a mold releasing film for printed circuit board production. It is respectfully submitted that the terminology "for printed circuit board production" is particularly descriptive of the present invention, and the limitation "having a thickness of 10-100 μm " sets forth a particular difference in a thickness of PPE film that is different from that which is set forth in Kohn.

Kohn discloses an ultra-thin PPE film (250Å) used as a gas exchange membrane. For Kohn's application, a PPE film with a thickness of 10 to 100 μm cannot be used since such a PPE film does not fulfill the necessary gas permeability. Conversely, Kohn's ultra-thin PPE film

cannot be used as a mold releasing film since such a film would be broken upon pressing during a circuit board production.

Hence, it is respectfully submitted that Kohn does not teach or suggest a mold releasing film for printed circuit board production, which comprises a resin layer (P) having a thickness of 10-100 μm , containing (A) a polyphenylene ether-based resin in an amount of 50 wt% or more, as is recited in amended independent claim 1 of the present application.

Hence, it is respectfully submitted that amended independent claim 1 of the present application is not anticipated under 35 U.S.C. §102(a) by Kohn (USPN 4,910,082). Since claims 8 and 13-15 depend from amended independent claim 1, claims 8 and 13-15 are not anticipated under 35 U.S.C. §102(a) by Kohn (USPN 4,910,082) for at least the reasons amended independent claim 1 is not anticipated under 35 U.S.C. §102(a) by Kohn (USPN 4,910,082).

REJECTION UNDER 35 U.S.C. §103:

In the Office Action, at page 2, claims 1-2, 5-6, 8, 13-14 and 16 were rejected under 35 U.S.C. §103(a) for the reasons outlined previously (claims 1-2, 5-6, 8, 13-14 and 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Takada et al. (JP 3-126538; hereafter, Takada). The reasons for the rejection are set forth in the previous Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Independent claim 1 has been amended to include the terminology "having a thickness of 10-100 μm ." It is respectfully submitted that the terminology "for printed circuit board production" is particularly descriptive of the present invention, and the limitation "having a thickness of 10-100 μm " sets forth a particular difference in a thickness of film that is different from that which is set forth in Takada. Takada discloses a PPE resin sheet having a mold releasing sheet, but does not teach or suggest a mold releasing film for printed circuit board production or a film having a thickness of 10-100 μm . Takada does not teach that a PPE film with a thickness of 10-100 μm is suitable as a mold releasing film for a printed circuit board production.

Thus, Takada does not disclose a PPE mold releasing film with a thickness of 10 to 100 μm having the characteristics of the present invention (not broken upon pressing, flowability to the unevenness of a substrate, and the like).

It is respectfully submitted that Takada does not teach or suggest a mold releasing film for printed circuit board production, which comprises a resin layer (P) having a thickness of 10-100 μm containing (A) a polyphenylene ether-based resin in an amount of 50 wt% or more, as is recited in amended independent claim 1 of the present application.

Hence, it is respectfully submitted that amended independent claim 1 of the present

application is patentable under 35 U.S.C. §103(a) over Takada et al. (JP 3-126538). Since claims 2, 5, 6, 8, 13-14 and 16 depend from amended independent claim 1, claims 2, 5, 6, 8, 13-14 and 16 are patentable under 35 U.S.C. §103(a) over Takada et al. (JP 3-126538) for at least the reasons amended independent claim 1 is patentable under 35 U.S.C. §103(a) over Takada et al. (JP 3-126538).

NEW CLAIM 18:

New claim 18 recites that the features of the present invention include a method for producing a printed circuit board comprising hot-pressing a copper-clad laminate or a copper foil and a prepreg or a heat-resistant film along with a mold-releasing film. Antecedent support for this language can be found in the present application for example, at pages 29-30, beginning at line 6 at page 29, and beginning at page 48, line 11, as well as in Table 1. Nothing in the prior art teaches or suggests using a PPE film as a mold releasing film. It is submitted that this new claim distinguishes over the prior art.

EXAMINER'S RESPONSE TO ARGUMENTS:

In the Office Action, at pages 3-5, the Examiner provided his response to the Amendment filed June 11, 2008.

In view of the amendment and arguments herein, it is respectfully submitted that the Examiner's concerns have been overcome.

ALLOWABLE SUBJECT MATTER:

In the Office Action, at page 5, claims 7 and 9-12 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicants thank the Examiner for his careful review of the claims and his finding that claims 7 and 9-12 would be allowable if suitably amended.

Former claim 9 has been added back as new independent claim 17, amended as set forth above, and is now submitted to be in allowable form. Claims 10-12 depend directly or indirectly from claim 17 and should also be in condition for allowance.

Since the remaining claims depend from amended independent claim 1, the remaining claims are also allowable for at least the reasons amended independent claim 1 is allowable.

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. And further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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